What is claimed is:

1. A method for controlling a controlled process in response to an input signal and a disturbance signal, the method comprising:

modeling the controlled process in a process model;

controlling the process model by a first controller;

isolating the first controller from the disturbance signal so that the first controller may be designed for an optimal response to the input signal;

driving the first controller by a first drive signal proportional to the difference between the input signal and a process model output signal;

isolating a second controller from the input signal so that the second controller may be designed for an optimal response to the disturbance signal; and

driving the second controller by a second drive signal proportional to difference between a process output signal and the process model output signal.

2. The method of claim 1, wherein isolating the first controller from the disturbance signal so that the first controller may be designed for an optimal response to the input signal comprises:

cascading the first controller and the process model in a partitioned control loop; and

configuring the partitioned control loop to operate independently of feedback from the process output signal.

3. The method of claim 2, wherein driving the second controller by a signal proportional to difference between a process output signal and the process model output signal comprises subtracting from the first drive signal the difference between the input signal and the

process output signal.

4. The method of claim 3, wherein the process output signal comprises a signal proportional to a process output and a load disturbance.

5. The method of claim 4, further comprising:

generating an adjustment signal proportional to the difference of the process output signal and process model output signal; and

adjusting the second controller by the adjustment signal.

6. The method of claim 1, wherein isolating the first controller from the disturbance signal so that the first controller may be designed for an optimal response to the input signal comprises isolating the first controller from the process output signal.

7. A method for controlling a controlled process in response to an input signal and a disturbance signal, the method comprising:

predicting a process output to create a predicted process output signal;

generating an error signal based on the input signal and the predicted process output signal;

generating a first control signal based on a disturbance signal and the error signal; and

processing the error signal and the first control signal to generate a process control signal to control the controlled process;

wherein the error signal is generated independently of the first control signal and process control signal.

8. The method of claim 7, wherein generating an error signal based on the input signal and the predicted process output signal comprises generating the error signal in a feedback

loop partitioned from the first control signal and the process control signal.

9. The method of claim 7, wherein generating a first control signal based on a disturbance signal and the error signal comprises:

measuring the output of the controlled process affected by a load disturbance; and

subtracting a signal proportional to the output of the controlled process from the input signal.

10. The method of claim 9, wherein generating an error signal based on the input signal and the predicted process output signal comprises generating the error signal in a feedback loop partitioned from the first control signal and the process control signal.

11. The method of claim 7, wherein processing the error signal and the first control signal to generate a process control signal to control the controlled process comprises:

generating a first conditioned signal based on the error signal;

generating a second conditioned signal based on the first control signal; and

summing the first and second conditioned signals to generate the process control signal.

12. A method for controlling a controlled process in response to an input signal and a disturbance signal, the method comprising:

modeling a controlled process and generating a process model signal in a first partitioned feedback loop;

generating a predicted error signal proportional to the difference between the input signal and the process model signal;

generating a first control signal proportional to the difference between the predicted error signal and an output signal proportional to the output of the controlled process and the

disturbance signal in a second partitioned feedback loop;

processing the predicted error signal and the first control signal to generate a process control signal to control the controlled process;

wherein the first partitioned feedback loop operates independently of the second partitioned feedback loop.

13. The method of claim 12, wherein processing the predicted error signal and the first control signal to generate a process control signal to control the controlled process comprises:

generating a first conditioned signal based on the predicted error signal;

generating a second conditioned signal based on the first control signal; and

summing the first and second conditioned signals to generate the process control signal. model and the first controller are configured in a partitioned control loop so that the first controller receives feedback from the process model.